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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,206	09/10/2003	Donald E. Schneider	9709A	5584
112	7590	09/22/2006	EXAMINER	
ARMSTRONG WORLD INDUSTRIES, INC. LEGAL DEPARTMENT P. O. BOX 3001 LANCASTER, PA 17604-3001			CHEVALIER, ALICIA ANN	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/659,206	Applicant(s) SCHNEIDER ET AL.	
	Examiner Alicia Chevalier	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RESPONSE TO AMENDMENT

1. Claims 34-62 are pending in the application, claims 1-33 have been cancelled.
2. Amendments to the specification, filed on June 22, 2006, have been entered in the above-identified application.

REJECTIONS

3. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Rejections - 35 USC § 103

4. Claims 1-46 and 48-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erb et al. (U.S. Patent No. 3,932,245) in view of Fry et al. (U.S. Patent No. 4,614,680) and Arendt et al. (U.S. Patent No. 5,990,214).

Erb discloses a textured surface covering (*floor covering, col. 1, lines 9-18*) comprising a textured substrate (*base, col. 4, line 30*) and a layer (*wear layer, col. 4, line 8*) overlying the textured substrate (*figures 6 and 8*). The textured substrate has a textures surface (*figures 6 and 8*). The layer comprises a melt processable composition comprising a melt processable polymer resin (*polyvinyl chloride, col. 4, line 8*) and the layer is deemed to have a first surface adjacent the textured surface and a second surface spaced from the textured surface (*figures 6 and 8*). The layer conforms to the textured surface, whereby the first and second surfaces substantially follow

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the contours of the textured surface (6 and 8). The layer is substantially uniform in thickness, i.e. thickness that varies less than about 20% (*col. 13, lines 4-6*).

Erb fails to disclose that the melt processable polymer resin contains a melt processing aid or that the difference in height of the textured surface.

Arendt discloses a polyvinyl chloride resin for a wear layer in flooring applications (*col. 5, lines 23-32*). The resin also includes a plasticizing additive, i.e. melt processing aid, such as oils and lubricants (*col. 3, lines 11-16*). The plasticizer provide stain resistance and processibility (*col. 5, lines 30-32*).

Arendt also discloses that the plasticizer increases the viscosity of the resin (*col. 8, lines 49-58*). Therefore, the exact viscosity of the melt processable composition is deemed to be a result effective variable with regard to the melt processing aid. It would require routine experimentation to determine the optimum value of a result effective variable, such as viscosity, in the absence of a showing of criticality in the claimed viscosity. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art would have been motivated to optimize the viscosity of the melt processable composition depending on what type of aids were needed.

Fry discloses that the configuration of the base layer can be varied as desired to provide different constructions of the decorative product of the invention (*col. 4, lines 21-24*). Furthermore, the configuration can provide differential height, differential texture and differential gloss features as desired to impart an overall pleasing aesthetic quality which is eminently desirable in floor covering products (*col. 2, line 66 through col. 3, line 2*).

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Therefore, the exact texture height to horizontal distance of the surface texture is deemed to be a result effective variable with regard to the desired aesthetic effect. It would require routine experimentation to determine the optimum value of a result effective variable, such as texture height to vertical distance, in the absence of a showing of criticality in the claimed texture height to vertical distance. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art would have been motivated by optimize the texture height to vertical distance in order to create different aesthetic effect, such as differential texture and gloss levels.

Erb, Fry and Arendt are analogous because they all disclose wear resistant flooring.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use Arendt's melt processable polymer resin with melt processing aid as the wear layer in Fry in order to provide stain resistance and processibility (*Arendt col. 5, lines 30-32*).

5. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Erb in view of Fry and Arendt as applied above, and further in view of Smith (US Patent No. 4,312,686).

Fry and Arendt are relied upon as described above.

Fry and Arendt fail to disclose that there are no visible bubbles entrapped between the first surface of the layer and the adjacent pre-textured surface.

Smith discloses a floor covering composite comprising a base web, a print layer, and a vinyl wear coat (*figure 7*). Smith teaches manufacturing the floor covering in such a way as to form a smooth uniform film and to prevent bubbles or wrinkles in the composite (*col. 3, lines 67-68*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to set up the equipment of Fry and Arendt to prevent air bubbles from forming and becoming entrapped in view of the teaching of Smith because air bubbles are undesirable since they cause the wear layer to separate from the substrate.

ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments in the response filed June 22, 2006 regarding the 35 U.S.C. 103 rejections over Erb, Fry and Arendt of record have been carefully considered but are deemed unpersuasive.

Applicant argues that contrary to the understanding of those of ordinary skill in the art, a substrate with very fine embossing or texturing can have a wear layer applied that results in the very fine embossing or texture being carried through the wear layer. Specifically, Applicant argues that none of the prior art teaches or suggests the claimed height to horizontal distance.

Applicant has not provided evidence comparing the prior art with the instant claimed invention to show Applicant's unexpected results.

Applicant argues that there is no motivation, suggestion or teaching of the desirability of selecting a very fine texture or embossing to coat with a wear layer.

The examiner respectfully disagrees. Fry clearly discloses that the configuration of the base layer can be varied as desired to provide different constructions of the decorative product of the invention (*col. 4, lines 21-24*). Furthermore, the configuration can provide differential height, differential texture and differential gloss features as desired to impart an overall pleasing aesthetic quality which is eminently desirable in floor covering products (*col. 2, line 66 through*

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col. 3, line 2). Fry clearly discloses that the configuration of the texture is an optimizeable design choice, in the absence of a showing of criticality in the claimed texture.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ac
9/18/06

**ALICIA CHEVALIER
PRIMARY EXAMINER**